



**Addendum Revision 1 to the
Response Action Work Plan
Troy High School Removal Plan**

116 East Missoula Avenue

Troy, Montana

March 15, 2006



ORIGINAL

**ADMINISTRATIVE
RECORD**

1.0 Introduction

This addendum to the Response Action Work Plan (RAWP) (CDM Federal Programs Corporation [CDM] 2003) includes property-specific characterization data. Specific remedial activities to be performed at this property are detailed on the following Contract Drawing:

- Troy High School 116 East Missoula Avenue Interior Remediation Plan

Removal and restoration activities will be conducted in accordance with the RAWP, this RAWP Addendum, and the Design Specifications for Residential Removals (U.S. Department of Transportation John A. Volpe National Transportation Systems Center [Volpe] 2004), forthwith referred to as the Contract Documents. All project quality assurance and quality control requirements for measurement reports will be addressed in a future data summary report.

2.0 General Information

- Removal activities will be scheduled between June 16, 2006 and August 1, 2006.
- The removal contractor will utilize the property's water source for personnel decontamination. Decontamination water will be captured and disposed of properly. Property water usage is expected to be minimal. If monthly usage during remedial activities is higher than average usage without remedial activities, the government will pay the additional costs based on 2005 monthly water bill statements.
- The electricity to the building will be turned off as needed for construction and will be restored when the restoration activities are complete.
- Only government-authorized personnel will be permitted inside the construction zone during removal and restoration activities.
- Some doors may be left unlocked and some windows may be left open as part of the removal activities; therefore, security will be provided whenever the removal contractor is not working. When the removal activities are complete, the windows and doors will be locked and additional security will not be provided. CDM will be

responsible for the key to the property until removal and restoration activities are complete, at which time the key will be returned to the principal.

- If the Lincoln County superintendent, school principal, or administration staff have questions or concerns, he or she should contact Kim Fox at (406) 291-1460.

3.0 Background Information

This section includes property information that was obtained from various investigations and sampling activities performed by CDM.

3.1 Exterior:

- Vermiculite was not observed in the exterior soils of the property.
- Fifteen soil samples were used to characterize the property and design this removal action plan. Eight of these samples were collected during the contaminant screening study from the yard surrounding the gym, and south of the parking lot. Analytical results for all of the samples were non-detect for Libby amphibole (LA) asbestos. Seven samples were collected during the pre-design inspection to delineate contamination from the yard on the east and south sides of the main building. Analytical results for these samples were non-detect for LA asbestos.

3.2 Interior:

- The building has an original structure with an addition on the north side, two additions on the south side, two entryways on the east side, and one entryway on the west side. Area 1 is an unfinished attic above one of the two south additions, the school auditorium and stage. Area 2 is an unfinished attic above the north addition, the school library. There is no flooring above the joists in Areas 1 and 2.
- Area 1 is accessed by a 36-inch by 24-inch removable panel, located 15-feet above the stage. Area 2 is accessed by a 36-inch by 24-inch removable panel, located 8-feet above the floor in the main hallway.
- Area 1 is insulated with 4 inches of vermiculite insulation, overlain by 8 inches of blown-in fiberglass insulation. Area 2 is insulated with 5 inches of vermiculite insulation, overlain by 12 inches of blown-in fiberglass insulation. Areas 1 and 2 do not share airspace with the original attic, the attic of the southern-most addition, or the entryways.
- The fiberboard tiles in the ceiling above the stage were observed to be loose. Vermiculite insulation was observed on the stage beneath these ceiling tiles.
- Vermiculite insulation was not observed in the original attic, the attic above the southern-most addition, in the entryway attics, the interior walls, the exterior walls, the living and storage spaces on the ground and second floors, the basement, or the other buildings on the campus.

- Seventeen dust samples were collected to characterize the ground and second floors, and basement. Analytical results for all dust samples were non-detect for LA asbestos.
- One dust sample was collected within the detached garage on the property. The analytical result for this dust sample was non-detect for LA asbestos.

The Contract Drawing details areas to be remediated. This information was obtained from the Exterior Inspection Checklist (EIC) and the Supplemental Interior Inspection Checklist (SIIC) that were completed during the pre-design inspection. Note that the EIC and SIIC sketches are approximate and are considered field notes.

4.0 Summary of Removal Activities

Removal activities will consist of interior remediation only. Vermiculite and fiberglass insulation will be removed from the attic. Areas of the attic where insulation was removed will be reinsulated and restored to their original conditions. Any outlets, conduits, gaps, etc. found to contain vermiculite insulation will be cleaned and sealed. The fiberboard ceiling tiles above the stage will be removed and replaced with finished sheetrock. An interior cleaning will be performed on the stage on the ground floor.

5.0 References

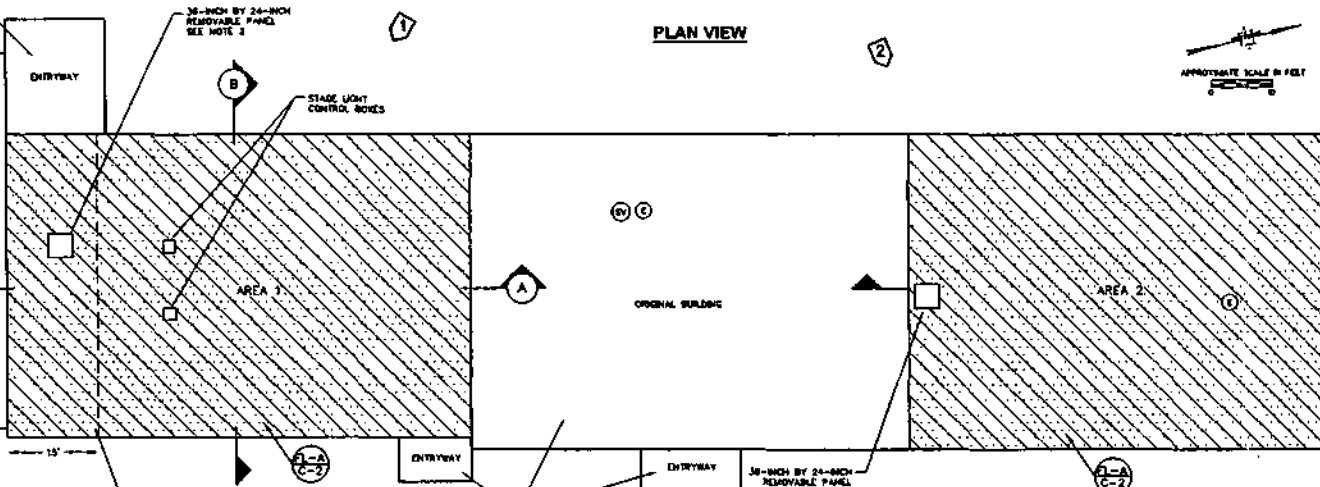
CDM 2003. Response Action Work Plan, U.S. Environmental Protection Agency (EPA) Libby Asbestos Project, Libby, Montana. Prepared for EPA by Volpe and CDM. November.

Volpe 2004. Design Specifications for Residential Removals, EPA Libby Asbestos Project, Libby, Montana. Prepared in conjunction with CDM. April.

I acknowledge that I have received a copy of the Work Plan Addendum for the property located at the address stated for review and comment.

 
Superintendent Date

ENTRYWAY DOES NOT CONTAIN VERMICULITE INSULATION AND DOES NOT SHARE AIRSPACE WITH AREA 1. REMEDIATION IS NOT REQUIRED.

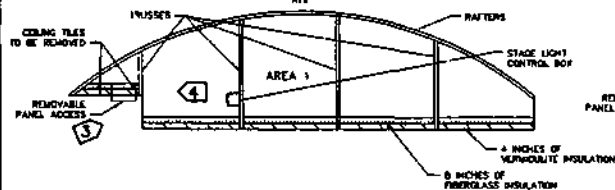


INTERIOR REMEDIATION NOTES (REFER TO CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION)

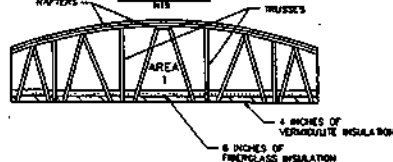
1. DRYWALL AN 18-INCH BY 18-INCH OR EQUIVALENT AREA IS MAINTAINED AT THE ATTIC ACCESS FREE OF OBSTACLES FOR THE INGRESS AND EGRESS OF PERSONNEL.
2. CONSTRUCT SCAFFOLDING TO ACCESS AREAS 1 AND 2. THE ACCESS TO AREA 1 IS LOCATED 15-FEET ABOVE THE STAGE. THE AREA 2 ACCESS IS LOCATED 8-FEET ABOVE THE FLOOR.
3. IF NECESSARY, CREATE AN OPENING ON THE WEST SIDE OF THE BUILDING FOR VENTILATION DURING INSULATION REMOVAL. RESTORE THE OPENING WITH A VENT UPON COMPLETION OF REMEDIAL ACTIVITIES.
4. REMOVE, TRANSPORT, AND DISPOSE OF ALL INSULATION FROM THE ATTIC.
5. BUILD CONTAINMENT THAT ENCOMPASSES AT A MINIMUM THE 15-FOOT BY 53-FOOT STAGE BENEATH THE SOUTH END OF AREA 1. REMOVE AND PROPERLY DISPOSE OF CEILING TILES ABOVE THE STAGE.
6. PERFORM AN INTERIOR CLEANING OF THE CONTAINED AREA. RESTORE THE CEILING WITH 5/8-INCH SHEETROCK FINISHED WITH ONE COAT OF WHITE PAINT.
7. ALLOW TWO DAYS AFTER REMEDIAL ACTIVITIES FOR MAINTENANCE TECHNICIANS TO PERFORM ELECTRICAL INSPECTION AND NECESSARY REPAIRS AND/OR UPDATES.
8. INSTALL BLOW-IN INSULATION IN AREAS 1 AND 2, AND RESTORE ALL AFFECTED ATTIC AREAS. THE INSTALLED INSULATION WILL BE SUFFICIENT TO MEET THE CALCULATED CEILING RATING OF R-36 IN AREA 1, AND R-52 IN AREA 2.
9. INSPECT ALL BEAMS, GABLE CORNERS, AND ELECTRICAL FUTURES IN THE AUDITORIUM FOR VERMICULITE INSULATION. SPECIFICALLY, THE CEILING AND STAGE LIGHTS. ANY AREAS CONTAINING VERMICULITE INSULATION WILL BE CLEANED AND SEALED. CONSTRUCTION OF ADDITIONAL SCAFFOLDING MAY BE REQUIRED.

SOUTH ADDITION DOES NOT CONTAIN VERMICULITE INSULATION AND DOES NOT SHARE AIRSPACE WITH AREA 1. REMEDIATION IS NOT REQUIRED.

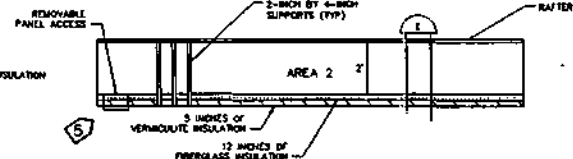
SECTION A N/S



SECTION B N/S



SECTION C N/S



VERMICULITE INSULATION TO BE REMOVED

NON-VERMICULITE INSULATION TO BE REMOVED (FIBERGLASS, CELLULOSE, ETC.)

DEMOLITION QUANTITIES				
AREA DESIGNATION	INSULATION TYPE	AREA (SQ FT)	DEPTH (IN.)	VOLUME (CU YD)
1	VERMICULITE	2000	6	47
2	FIBERGLASS	2000	12	94
TOTAL				141

INSULATION QUANTITIES				
AREA DESIGNATION	INSULATION TYPE	AREA (SQ FT)	DEPTH (IN.)	VOLUME (CU YD)
1	VERMICULITE	2000	6	47
2	VERMICULITE	2000	6	94
2	FIBERGLASS	2000	12	138
TOTAL				289

GENERAL INFORMATION:

1. REMEDIAL ACTIVITIES WILL BE SCHEDULED BETWEEN JUNE 18, 2006 AND AUGUST 1, 2006.
2. IF REMEDIAL CONTRACTOR WILL UTILIZE THE PROPERTY'S WATER SOURCE FOR PERSONNEL DECONTAMINATION DECANTATION WATER WILL BE CAPTURED AND DISPOSED OF PROPERLY. PROPERTY WATER USAGE IS EXPECTED TO BE MINIMAL. IF MONTHLY USAGE DURING REMEDIAL ACTIVITIES IS HIGHER THAN ANTICIPATED, WITHOUT REMEDIAL ACTIVITIES, THE OWNER/CLIENT WILL PAY THE ADDITIONAL COSTS BASED ON 2005 MONTHLY WATER BILL STATEMENTS.
3. THE ELECTRICITY TO THE BUILDING WILL BE TURNED OFF AS NEEDED FOR CONSTRUCTION AND WILL BE RESTORED WHEN THE RESTORATION ACTIVITIES ARE COMPLETE.
4. ONLY GOVERNMENT-AUTHORIZED PERSONNEL WILL BE PERMITTED INSIDE THE CONSTRUCTION ZONE DURING REMEDIAL AND RESTORATION ACTIVITIES.
5. SOME DOORS MAY BE LEFT UNLOCKED AND SOME WINDOWS MAY BE LEFT OPEN AS PART OF THE DEMOLITION ACTIVITIES. THEREFORE, SECURITY WILL BE PROVIDED THROUGHOUT THE REMEDIAL CONTRACTOR IS NOT WORKING WHEN THE DEMOLITION ACTIVITIES ARE COMPLETE. THE WINDOWS AND DOORS WILL BE LOCKED AND ADDITIONAL SECURITY WILL NOT BE PROVIDED. CON WILL BE RESPONSIBLE FOR THE KEY TO THE PROPERTY UNTIL REMEDIAL AND RESTORATION ACTIVITIES ARE COMPLETE, AT WHICH TIME THE KEY WILL BE RETURNED TO THE PRINCIPAL.
6. IF THE LINCOLN COUNTY SUPERINTENDENT, SCHOOL PRINCIPAL, OR ADMINISTRATION STAFF HAVE QUESTIONS OR CONCERNS, HE OR SHE SHOULD CONTACT CON FOR AT (406) 291-1400.

NOTE: REFER TO SHEET C-1 FOR GENERAL NOTES, LOCATIONS, MAPS AND OTHER INFORMATION. REFER TO SHEET'S C-1, D-2 AND D-3 FOR DETAILS.

Symbol	Revisions	Date	Approved
	Revisions		
	Revisions		
	Revisions		

CDM Federal Programs Corporation

U.S. DEPARTMENT OF TRANSPORTATION
JOHN A. VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER

Designed by A. POLINAS	Libby Asbestos Project LIBBY, MONTANA
Drawn by M. JURY	TROY HIGH SCHOOL 116 EAST MISSOULA AVENUE TROY, MONTANA
Checked by G. McKENZIE	INTERIOR REMEDIATION PLAN
Submitted by T. WALL	AS NOTED MARCH 15, 2005
	Scale: 1/8" = 1'-0"
	Drawn by: M. JURY
	Check by: G. McKENZIE



1 WEST EXTERIOR OF BUILDING



2 WEST EXTERIOR OF BUILDING



3 AREA 1 ACCESS



4 ATTIC AREA 1



5 AREA 2 ACCESS